

REMARKS/ARGUMENTS

Upon entry of this Amendment, which amends claims 1, 7-10, and 12-13, and adds new claims 18-26, claims 1-26 will be pending. In the Office Action, claims 1, 4, and 7-12 were rejected under 35 U.S.C. § 102(e) as being anticipated by Lewis (U.S. Patent No. 6,205,563); claims 2-3, and 5-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lewis in view of Natarajan et al. (U.S. Patent No. 6,765,864, hereinafter "Natarajan"); and claims 13-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lewis in view of Groath et al. (U.S. Patent No. 6,571,285, hereinafter "Groath").

Claims 1-17

Claim 1 was rejected under 35 U.S.C. § 102(e) as being anticipated by Lewis. Lewis discloses a network manager that manages alarms among multiple domains. As shown in Fig. 6 of Lewis, an intra-domain alarm for a first domain and an intra-domain alarm for a second domain are generated in steps 62 and 64. The intra-domain alarms are correlated and an inter-domain alarm is generated in step 67. An inter-domain alarm is analyzed to determine a corrective action.

Applicants submit that Lewis does not disclose or suggest every element of claim 1, as amended. For example, Lewis does not disclose or suggest:

discovering a failure generated by the video and data network, wherein the failure is a root cause;

after discovering the root cause failure, correlating the root cause failure with one or more failures to determine related failures that are generated as a result of the root cause failure;

suppressing the related failures; and . . .

if the root cause failure is automatically resolvable, resolving the root cause failure, wherein resolving the root cause failure resolves the related failures.

Lewis discloses correlating intra-domain alarms in order to generate an inter-domain alarm. If an inter-domain alarm is considered a root cause, then Lewis does not disclose

or suggest discovering a root cause failure and then after discovering a root cause failure, correlating the root cause failure with one or more failures to determine related failures that are generated as a result of the root cause failure. Lewis generates an inter-domain alarm based on correlation of intra-domain alarms. The correlation of intra-domain alarms does not include the inter-domain alarm and thus the root cause failure. Thus correlating the root cause failure with one or more failures after discovering the root cause failure is not disclosed or suggested by Lewis.

Accordingly, the invention as recited in claim 1 is vastly different from Lewis. In claim 1, a root cause failure is discovered and then related failures are determined that are being caused by the root cause failure. These related failures are then suppressed. This provides many advantages. For example, because the root cause failure is discovered, any related failures that are being caused by the root cause failure may be suppressed. Thus, related failures that would be resolvable if the root cause failure is resolved are not dealt with and thus valuable resources and time are not wasted in resolving the related failures. This is because by resolving the root cause failure, related failures are resolved as is recited in claim 1.

In Lewis, a root cause failure is not discovered and then correlated to determine related failures. The generation of an inter-domain alarm is a different concept from discovering the root cause alarm and then determining related failures. In Lewis, the inter-domain alarm is generated by the network management system and thus the root cause does not need to be discovered because it is being generated by the network management system. Further, because the root cause failure is not discovered and then related failures determined and suppressed, Lewis may perform extra steps that may be avoided by embodiments of the present invention. For example, as shown in step 61 of Fig. 6, corrective action based on the status information may be performed in a first domain. Accordingly, Lewis attempts to correct the intra-domain alarm instead of first attempting to correct the inter-domain alarm, which may resolve both of the intra-domain alarms. Thus, the advantages provided by embodiments of the present invention are not disclosed or suggested by Lewis.

Also, if the intra-domain alarm is considered the root cause, it is not correlated with other related alarms that are generated as a result of the intra-domain alarm. Additionally,

Lewis does not disclose or suggest resolving the intra-domain alarm if it is the root cause alarm. For example, in step 61 in Lewis, corrective action is provided. If corrective action cannot be taken, then an intra-domain alarm is created. In step 66, the inter-domain alarm is created, then Lewis analyzes the inter-domain alarm to determine a corrective action. Thus, if the intra-domain alarm is considered the root cause, the intra-domain alarm is not resolved by Lewis. Rather, the inter-domain alarm is resolved in step 67. Also, if the corrective action in step 61 is considered the resolving step, then the intra-domain alarm is not correlated with other alarms in Lewis.

Accordingly, Applicants respectfully request withdrawal of the rejection of claim 1. Claims 2-17 depend from claim 1 and thus derive patentability at least therefrom. These claims also recite additional novel and nonobvious features. For example, claim 7 recites “determining one or more customers affected by the root cause failure.” The rejection cites col. 3, lines 54-64 and col. 11, lines 48-65 as disclosing this element. Col. 3, lines 54-64 in Lewis discloses the determination of a domain that is adjacent to a first domain. Col. 11, lines 48-65 in Lewis discloses determining other domains that may be impacted by the intra-domain alarm. Applicants submit that this does not disclose or suggest determining customers that are affected by the root cause failure. Rather, Lewis deals with domains and not specific customers. Nowhere in Lewis is it disclosed or suggested that customers using the video and data network can be determined. This provides valuable advantages. For example, all customers that are affected by the root cause failure and related failures can be determined. These customers may then be rerouted to different routes. Also, the customers may be notified of the failures. This may provide valuable customer service.

Further, in claim 8, Lewis fails to disclose or suggest determining one or more customers affected by the failure using customer data to correlate the one or more customers for the failure. Nowhere in Lewis are customer records disclosed or suggested. Lewis does not disclose or suggest that customer records can be used to determine customers that are affected by the failure.

New Claim 18

Applicants submit that the cited references do not disclose or suggest every element of new claim 18. The cited references do not disclose or suggest receiving an alarm from a network element in the video and data network and determining if the alarm is a root cause alarm. If the alarm is not a root cause alarm, then the root cause alarm is determined. Further, the cited references do not disclose or suggest determining one or more customers receiving services from the video and data network that are affected by the root cause alarm. Specifically, Lewis does not disclose or suggest receiving an alarm from the network element in the video and data network and determining if the alarm is a root cause alarm. Rather, Lewis discloses generating an inter-domain alarm. The inter-domain alarm is not received from a network element. Further, Lewis does not disclose or suggest any determination step to determine if an alarm is a root cause alarm. Also, Lewis does not disclose or suggest determining customers that are receiving services from the video and data network that are affected by the root cause alarm. Accordingly, Applicants respectfully request a Notice of Allowability for claim 18.

New Claims 19-26

Applicants submit that new claims 19-20 are allowable over the cited references.

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Reply to Office Action of November 2, 2004

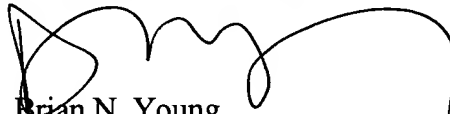
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CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



Brian N. Young
Reg. No. 48,602

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 415-576-0200
Fax: 415-576-0300
BNY:jtc
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Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 4. This sheet, which includes Fig. 4 replaces the original sheet including Fig. 4.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

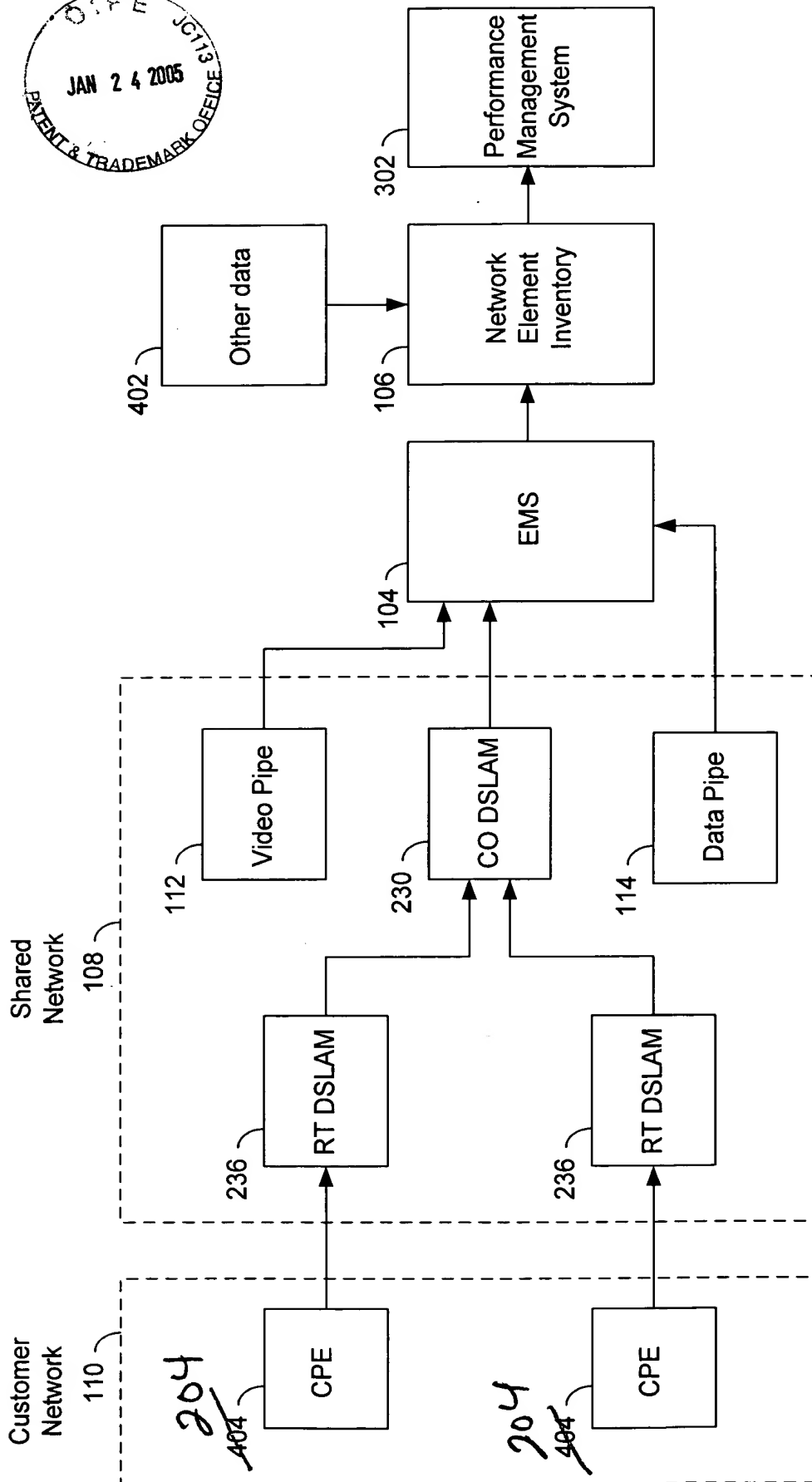


FIG. 4